

REMARKS

Claims 1 is amended. Formal drawings are submitted. No new matter has been introduced. Claims 1-13 are pending. Claims 2 and 3 have been cancelled. In light of same, and in light of the following remarks, allowance of all pending claims is respectfully requested.

Drawings

Applicant has submitted formal drawings herewith to replace current drawings.

Rejections under 35 U.S.C. §102

Claims 1, 4, and 6

Claims 1, 4, and 6 stand rejected under 35 U.S.C. 102(b) as being anticipated by Ames, United States Patent No. 3,565,198, describing a steering, driving, and single track support system for vehicles.

Amended Claim 1 (and Claims 4 and 6 through dependency) is directed to a track assembly comprising: a frame; a first and second elongated spindle; a first idler wheel mounted to said first spindle wherein said first spindle is provided with an alignment mechanism for selectively varying an alignment of said first idler wheel, and wherein said alignment mechanism includes a locking mechanism for locking said first idler wheel in place once properly aligned; a second idler wheel operationally associated with said frame; and a continuous track provided around said first and second idler wheels.

To anticipate, a single prior art reference must disclose each element of the claim under consideration. W.L. Gore & Assocs. v. Garlock, Inc., 721 F.2d 1540 (Fed. Cir. 1983). Contrary to the Examiner's conclusions, Ames does not disclose or suggest all of the limitations of Claim 1, 4, or 6. Specifically, Ames does not disclose an alignment mechanism for selectively varying an alignment of said first idler wheel, and wherein said alignment mechanism includes a locking mechanism for locking said first idler wheel in place once properly aligned.

Generally, Ames discloses a vehicle that is steered through rotational movement of the supporting axles. (Ames Summary of the Invention). The rotational movement of the axles is accomplished through use of a linkage mechanism which interconnects the multiple axles of the

vehicle. (Ames Summary of the Invention). The linkage mechanism is attached to the axles in such way as to allow the axles, and thus the wheels, to be radially disposed to one another. This, in turn, allows the vehicle to be turned along a radius. (See Ames Summary of the Invention; col. 3-4; fig. 3). Turning the vehicle in such a manner allows the use of a single track instead of separate tracks disposed on opposite sides of the vehicle. (Ames Summary of the Invention).

Although it is not clear, it appears that the Examiner asserts the axle and linkage mechanism of Ames, which allows the wheels to be turned for steering the vehicle, to be equivalent to the alignment mechanism of Applicant's invention. However, this steering mechanism of Ames is not equivalent to the alignment mechanism of Applicant's invention.

The alignment mechanism of Applicant's invention permits the angular alignment of the front idler wheel to be adjusted left or right (into or out of the page in fig. 2 of the application) in order to be aligned properly with the rear idler wheel. Once the front idler wheel is properly aligned, it can be locked into place so that it remains properly aligned during use. (See Application at pg. 7, line 15-18; paragraph beginning on pg. 8, line 14; fig. 6). No similar structure exists in Ames to allow a front idler wheel to be adjusted in order to be aligned properly with a rear idler wheel and then to be locked into place once it has been properly aligned. The axle and linkage mechanism of Ames is for steering not for aligning, and it does not contain any locking structure to lock the wheel in place. Accordingly, because Ames does not disclose all of the elements of Claims 1, 4, and 6, it does not anticipate those Claims, and Applicant respectfully requests that the Examiner's rejection be withdrawn.

Claims 8, 11, and 13

Claims 8, 11, and 13 stand rejected under 35 U.S.C. 102(b) as being anticipated by Nordberg et al., United States Patent No. 5,988,775, describing a resilient track tensioning device for track-driven vehicles and track unit comprising such a device.

Claim 8, 11, and 13 all describe a track assembly comprising: a link pivotally connected at said second end of said frame at a pivot member to pivot in a generally vertical plane about a pivot axis defined by said pivot member, an imaginary dividing plane being defined by a vertical extension of said pivot axis; a second idler wheel operably provided on said link; and a tensioning device between said frame and said link to maintain an axis of said second

idler wheel below said pivot member and on a side of said imaginary dividing plane opposite from said first idler wheel.

To anticipate, a single prior art reference must disclose each element of the claim under consideration. W.L. Gore & Assocs. v. Garlock, Inc., 721 F.2d 1540 (Fed. Cir. 1983). Contrary to the Examiner's conclusions, Nordberg does not disclose or suggest all of the limitations of Claim 8, 11, and 13. Specifically, Nordberg does not disclose a tensioning device between the frame and the link to maintain an axis of the second idler wheel below the pivot member and on a side of an imaginary dividing plane opposite from the first idler wheel.

Generally, Nordberg discloses a tensioning wheel for track driven vehicles that includes an elongated pendular arm which consists of a front part and a rear part which are fixedly connected to one another. (Nordberg col. 5, lines 8-27). The tensioning wheel arrangement also includes a torsion arm attached to a torsion spring. (Nordberg col. 5, lines 52-62). This torsion spring and torsion arm exert a downward force on the rear end of the pendular arm. (Nordberg col. 5 lines 62-67; fig. 7; fig. 10). Figure 10 of Nordberg illustrates the movement of the pendular arm during normal operation. The downward movement of the pendular arm is restricted by an inwardly rubber coated ledge 86 on the underside of the pendular arm. (Nordberg col. 6 lines 35-45; fig. 9; fig. 10). The upward movement of the pendular arm is restricted by the tubular stiffening member 42 as said member strikes against the torsion arm 72. (Nordberg col. 6 lines 44-50; fig. 9; fig. 10). Thus, while the torsion spring and torsion arm in Nordberg exert a downward force on the pendular arm to keep the track in tension, the motion of the pendular arm in either direction (upward or downward) is limited by tubular stiffening member 42 and inwardly rubber coated ledge 86.

The Examiner asserts torsion spring 76 in Nordberg as being the equivalent to the tensioning device of the application. (See Office Action at 2; fig. 6-10 of Nordberg). However, this torsion spring in Nordberg does not maintain an axis of the idler wheel below a pivot member and on a side of an imaginary dividing plane opposite the first wheel. The torsion spring in Nordberg applies a downward force to the tensioning wheel 64, however, it does not limit the motion of the wheel so that it remains below a pivot member and on a side of an imaginary dividing plane opposite the first wheel. Instead, Nordberg uses a rubber coated ledge 86 and tubular stiffening member 42 to restrict the pendular movement of the idler wheel. (See

fig. 8-10 of Nordberg; col. 6, lines 35-50 – “Downward pendulating movement of the pendular arm 38 is restricted by an inwardly rubber-coated ledge 86 on the underside of said arm...[t]he upward pendulating movement of the pendular arm 38 may be restricted by the tubular stiffening member 42 .”) Thus, Nordberg uses three different structures – torsion spring 76, rubber coated ledge 86, and tubular stiffening member 42 – to limit the motion of the tensioning wheel. In contrast, the Application discloses one single tensioning device capable of limiting the motion of the second idler wheel. Because Nordberg does not disclose a tensioning device as described in the Application, it does not anticipate Claims 8, 11, and 13 of the Application, and Applicant respectfully requests that the Examiner’s objection be withdrawn.

Rejections under 35 U.S.C. §103

Claim 5

Claim 5 is rejected as being unpatentable over Ames (described above) in view of Leyonhjelm et al, United States Patent No. 6,502,840, describing a suspended axle with side and oscillating control linkage. Claim 5 depends from Claim 4 and is directed to a track assembly that includes a first idler wheel mounted to a first spindle wherein the spindle is provided with an alignment mechanism for selectively varying an alignment of the idler wheel, and wherein the alignment mechanism includes a locking mechanism for locking the idler wheel in place once properly aligned.

To establish a prima facie case of obviousness under 35 U.S.C. § 103, the Examiner must show that the references teach or suggest all claim limitations. However, as explained above, Ames does not disclose an alignment mechanism for selectively varying an alignment of said first idler wheel, and wherein said alignment mechanism includes a locking device for locking said first idler wheel in place once properly aligned.

Moreover, this deficiency in Ames is not remedied by Leyonhjelm because it too fails to disclose the alignment structure described in the Application. Leyonhjelm discloses a suspension linkage for an axle. (Leyonhjelm Summary of the Invention). The suspension includes an axle body 22 and a thrust arm 24 which extends rearward from the axle body and is connected to the frame 18 by a spherical bushing 26. (Leyonhjelm col. 2 lines 1-7; fig 2; fig 3). At the end of the suspension opposite the spherical bushing a scissors linkage connects the axle

body to the vehicle frame. (Leyonhjelm col. 2 lines 8-27; fig 2; fig 3). Although the spherical bushing would allow left and right movement of the axle (into and out of the page in figure 2 of Leyonhjelm), this movement is not used to align a first idler wheel as described in the application. In fact, this lateral movement in Leyonhjelm is described as being undesirable and is limited by the linkage (See Leyonhjelm col. 2 lines 30-42 – “The upper pivot bearings 52, 54, the center pivot bearings 68, 70 and the lower pivot bearings 74, 76 are thrust bearings that resist lateral loads on the axle body 22 to prevent the axle body from lateral motion, thereby preventing bounce steer.”). Furthermore, there is no structure in Leyonhjelm which is equivalent to the locking mechanism described in the application for locking an idler wheel in place once it is properly aligned.

Thus, these references, viewed alone or in combination, fail to teach or suggest all the limitations of Claim 5. Accordingly, Applicant respectfully requests that the Examiner’s rejection be withdrawn.

Claims 1 and 7

Claim 1 and 7 are rejected as being unpatentable over Schroter et al, United States Patent No. 2,345,158, describing wheeled underframes, in view of Shustack, United States Patent No. 4,932,677, describing a mobile cooler. Again, Claim 1 is directed to a track assembly that includes a first idler wheel mounted to a first spindle wherein the spindle is provided with an alignment mechanism for selectively varying an alignment of the idler wheel, and wherein the alignment mechanism includes a locking mechanism for locking the idler wheel in place once properly aligned. Claim 7 is dependent on Claim 1 and contains all of the limitations of Claim 1.

To establish a prima facie case of obviousness under 35 U.S.C. § 103, the Examiner must show that the references teach or suggest all claim limitations. However, neither Schroter nor Shustack disclose an alignment mechanism for selectively varying an alignment of said first idler wheel, and wherein said alignment mechanism includes a locking device for locking said first idler wheel in place once properly aligned. Schroter discloses an underframe for a car wherein the body of the car is used as a compensating member to connect axles which turn counter to one another. (Schroter col. 1 lines 8-20). The axles in Schroter rotate with respect to one another so that the vehicle can turn, but there is no structure in Schroter which is equivalent to the alignment

mechanism described in the application which is used for selectively varying an alignment an idler wheel, and wherein the alignment mechanism includes a locking mechanism for locking the idler wheel in place once properly aligned. Shustack discloses a mobile cooler which uses endless tracks. (Schustack Abstract). The Examiner relies on Shustack to disclose the endless tracks which are not disclosed in Schroter. (Office Action at 3). However, Shustack does not cure the deficiencies of Schroter because it too fails to disclose an alignment mechanism as described in the application.

Thus, these references, viewed alone or in combination, fail to teach or suggest all the limitations of Claims 1 and 7. Accordingly, Applicant respectfully requests that the Examiner's rejection be withdrawn.

Claim 12 and 13

Claim 12 and 13 are rejected as being unpatentable over Nordberg (described above), in view of Schroter (described above). Claim 12 and 13 are both drawn to a cart comprising a track assembly that includes a link pivotally connected at said second end of said frame at a pivot member to pivot in a generally vertical plane about a pivot axis defined by said pivot member, an imaginary dividing plane being defined by a vertical extension of said pivot axis; a second idler wheel operably provided on said link; and a tensioning device between said frame and said link to maintain an axis of said second idler wheel below said pivot member and on a side of said imaginary dividing plane opposite from said first idler wheel. As explained above, Nordberg does not disclose this structure. Moreover, Schroter does not cure this defect in Nordberg because it too lacks such structure. Thus, these references, viewed alone or in combination, fail to teach or suggest all the limitations of Claims 12 and 13. Accordingly, Applicant respectfully requests that the Examiner's rejection be withdrawn.

Objections to Claims 9 and 10

The Examiner has objected to Claims 9 and 10 as being dependent upon a rejected base claim. Claim 9 and 10 are both dependent on Claim 8, which, as explained above, should be allowed. Thus, Applicant respectfully requests that the Examiner's objection be withdrawn.

CONCLUSION

Taken together, Applicant respectfully submits that the device claimed by the instant Application contains novel properties not disclosed by the prior art references, and that the Claims are not anticipated nor obvious over the cited references. Moreover, Applicant's amendments herein place this Application in condition for allowance. Accordingly, withdrawal of the Examiner's rejections is respectfully requested.

In view of the above amendments and remarks, it is respectfully submitted that this Application is in condition for allowance and such action is earnestly solicited. However, should the Examiner have any further point of objection, the Examiner is urged to contact the undersigned so that a mutual agreement with respect to claim limitations can be reached.

Respectfully submitted,

Date: 03/07/07



Aaron Goodman
Registration No. 58,824
Dorsey & Whitney LLP
801 Grand Ave., Suite 3900
Des Moines, IA 50309
Telephone: (515) 283-1000
Fax: (515) 283-1060

ATTORNEY FOR APPLICANTS